

Tools Required for Installation:

For larger projects, the miter saw and drill are strongly recommended.



STANDARD RAIL

Standard Rail Kit Components

- 6', 8', 10' or 12' Deluxe Top Rail
- 6', 8' or 10' Flat Top Rail
- 6', 8', 10' or 12' Bottom Rail (Flat only)
- Spindles - Colonial or Square
 - 6' Colonial (14) Square (13)
 - 8' Colonial (19) Square (17)
 - 10' Colonial (24) Square (22)
 - 12' Colonial (29) Square (26)
- Brackets - Top Rail (2) Bottom Rail (2)
 - Top Rail (Deluxe or Flat)
 - Bottom Rail (Flat only)
 - Straight Brackets are available for post and all flat surface applications.
 - Curved Brackets are available for round column applications.
- 21 Coated Screws
 - (18) 2 1/2" Stainless Steel Screws
 - (3) 2" Stainless Steel Screws
- 10' or 12' Metal Insert (Deluxe or Flat Top Rail)
- Crush Block - 6'(1), 8'(1), 10'(2), 12'(3)



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7

1. Measure the inside opening between the mounting surfaces. (Fig. 1)

Note: Verify that the opening is not wider than the length of the rails provided.

2. Lay the bottom rail beside the mounting surfaces with the spindle holes facing up. Allow the rail to extend past the mounting surface on each side. Be sure to place the first spindle hole on each end of the rail the same distance from the mounting surface.

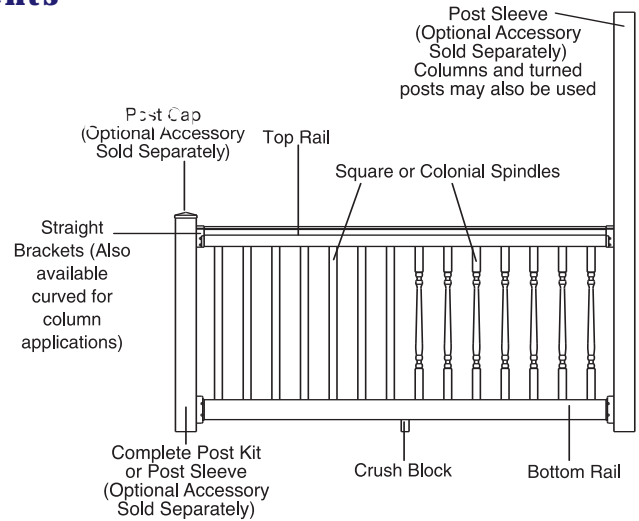
Note: Should the spindle holes fall inside or directly beside a mounting surface, slide the rail approximately 2" in either direction to align spindle holes evenly between mounting surfaces. When properly positioned, mark rail and cut. (Fig. 2)

3. Lay top rail beside bottom rail, aligning spindle holes, mark and cut to match length.

4. Locate the crush block. The formula for crush block length is:
 Desired clearance from bottom rail to deck + 3 1/4" = length of crush block.
 (Spindle lengths are sized for a traditional 2" clearance from bottom rail to deck.) Once the block is trimmed, insert into precut hole on underside of bottom rail.

5. Slide mounting brackets onto bottom rail. Place bottom rail into opening making sure rail is level. With brackets centered on the mounting surface, attach with screws. (Fig. 3)

Note: 10' and 12" EnduraRail Rail Kits should NOT be attached directly to the 4" Complete Post Kit or Post Sleeves. 10' & 12' Rail Kits should ONLY be attached directly to the supporting construction (i.e. support column or wall).



Note: When installing screws into fiberglass or synthetic materials, predrill holes using a 1/8" drill bit.

Note: If installing EnduraRail into a masonry wall, masonry screws must be used.

6. Insert spindles into precut holes in bottom rail. Square spindles come sized for either a 36" or a 42" rail height based on the traditional two-inch clearance. Colonial spindles only come sized for 36" rail height. If your application is different, you have the option of trimming the spindles to your desired height. **Be sure to check with your local code officials for any height requirements.**

7. Slide mounting brackets onto top rail. Place top rail on spindles inserting spindles one at a time while holding at an upward angle. Make sure rail is flush on all spindles. (Fig. 4)

8. Center top rail brackets on the mounting surface making sure top rail is aligned above bottom rail. Attach brackets with provided 2 1/2" screws. (Fig. 5)

9. Level the spindles vertically and place a locking screw through the side of the top and bottom rail brackets. The hole for this screw is not predrilled. (Fig. 6 & 7)
Note: Only one side (top and bottom) needs to be secured. There are extra 2"(2) and 2 1/2"(1) stainless screws provided.

Tools Required for Installation:

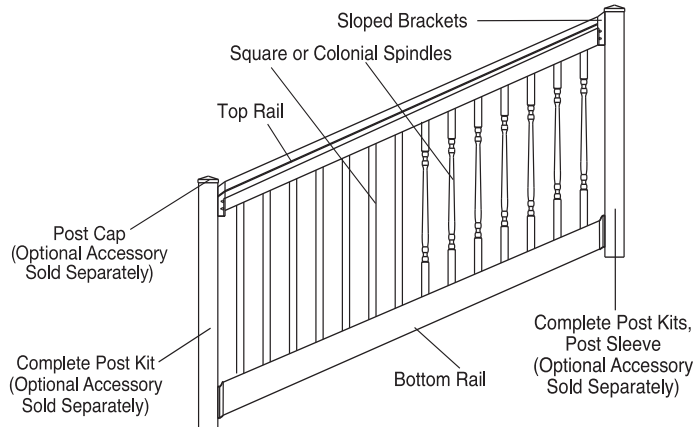
For larger projects, the miter saw and drill are strongly recommended.



STAIR RAIL

Stair Rail Kit Components

- 6', 8' or 10' Top Rail (Deluxe or Flat)
- 6', 8' or 10' Bottom Rail (Flat only)
- Spindles - Colonial or Square
 - 6' Colonial (11) Square (11)
 - 8' Colonial (15) Square (15)
 - 10' Colonial (19) Square (19)
- Brackets - Top Rail (2) Bottom Rail (2)
 - Top Rail (Deluxe or Flat)
 - Bottom Rail (Flat only)
 - Sloped for post and all flat surface applications
 - Straight Brackets are available for post and all flat surface applications.
 - Curved Brackets are available for round column applications.
- 21 Coated Screws
 - (18) 2 1/2" Stainless Steel Screws
 - (3) 2" Stainless Steel Screws
- 10' or 12' Metal Insert (Deluxe or Flat Top Rail)
- Crush Block - 6'(0), 8'(1), 10'(2)



1. Measure the inside opening between the mounting surfaces.

Note: Verify that the opening is not wider than the length of the top and bottom rails provided.

2. Lay the bottom rail on the stair tread with the spindle holes facing up. Allow the rail to extend past the mounting surface at the top and bottom of the stairs. Be sure to place the first spindle hole on each end of the rail the same distance from the mounting surface. (Fig. 1)

3. Mark rail where it crosses the mounting surfaces and cut to length and angle. (Fig. 2)

4. Lay top rail beside bottom rail, aligning spindle holes. Mark and cut to match length and angle.

5. Slide reversible, sloped mounting brackets on bottom rail. The sloped brackets are made to fit any angle between 30 and 34 degrees. Depending on your application, there may be marginal spacing in the bracket to rail fit.

6. Place bottom rail into opening. With brackets centered on the mounting surface, attach with screws. (Fig. 3)

Note: When installing screws into fiberglass or synthetic materials, predrill holes using a 1/8" drill bit.

Note: If installing EnduraRail into a masonry wall, masonry screws must be used.

7. Insert spindles into precut holes in bottom rail. Square spindles come sized for either a 36" or a 42" rail height based on the traditional two-inch clearance. Colonial spindles only come sized for 36" rail height. If your application is different, you have the option of trimming the spindles to your desired height. **Be sure to check with your local code officials for any height requirements.** (Fig. 4)

8. Slide mounting brackets onto top rail. Place top rail on spindles inserting spindles one at a time while holding at an upward angle. Make sure rail is flush on all spindles.

Note: Stair Kits with Deluxe Sloped Brackets are not reversible. There is an Upper Step Deluxe Bracket and a Lower Step Deluxe Bracket. The Flat Sloped Bracket is reversible.

9. Center top rail brackets on the mounting surface making sure it is aligned over bottom rail. Also make sure spindles are aligned at the desired angle. Attach brackets with screws. (Fig. 5)

10. Place a (provided) 2" locking screw through the side of the top and bottom rail brackets. The hole for this screw is not predrilled.

Note: Only one side (top and bottom) needs to be secured. There are extra 2"(2) and 2 1/2"(1) stainless steel screws provided.

Note: 10' and 12' EnduraRail™ Rail Kits should NOT be attached directly to the 4" Complete Post Kit or Post Sleeves. 10' & 12' Rail Kits should ONLY be attached directly to the supporting construction (i.e. support column or wall).



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5

Complete Post Kit Includes:

- (1) 4" x 4" x 38" or 4" x 4" x 44" Post
- (1) Structural Post Mount
- (1) 4" Post Kit Base
- (1) 4" Taper Cap
- (1) 1/2" - 13 x 12" Threaded Rod
- (2) 1/2" Washer
- (1) 1/2" Lock Washer
- (2) 1/2" Hex Nut
- (16) 2 1/2" Stainless Screws
- (1) 3" x 3" Square Plate with 1/2" hole
- (1) HVU Epoxy Capsule

Note: 10' and 12' EnduraRail Kits should NOT be attached directly to the 4" Complete Post Kit Or Post Sleeves. 10' and 12' EnduraRail Kits should ONLY be attached directly to the supporting construction (i.e. support column or wall).

Installation Instructions for Wood Deck Application: (See Wood Deck Application Diagram)

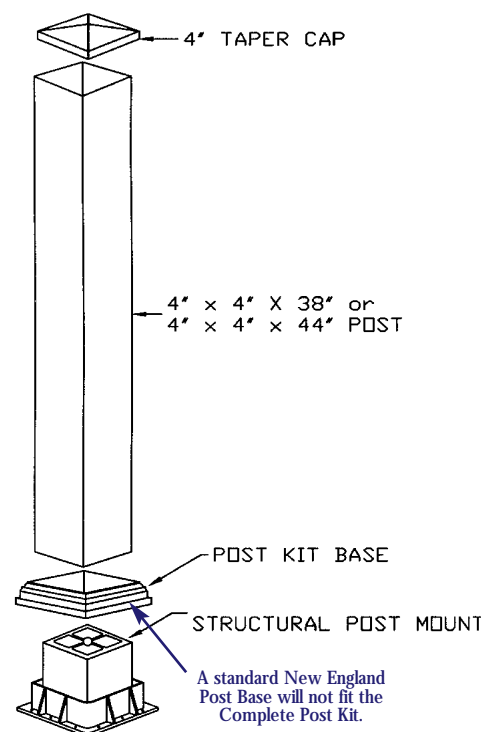
Tools Needed for Wood Deck Installation: Drill, 1/2" drill bit, #3 Phillips head bit, level, wrench, and appropriate personal protection equipment.

1. Make sure the area under the mounting location has an additional block between the joists directly under the deck surface. (See attached joist block diagram.)
2. Drill a 1/2" hole through wood surface and joist block.
3. Align center hole on post mount with hole in surface. Insert threaded rod with (1) 1/2" washer and (1) 1/2" hex nut on the top in that order.
4. Slide the 3" square plate onto the bolt under the mounting surface followed by (1) 1/2" washer and (1) 1/2" hex nut on the bolt leaving approximately 1" of threaded rod beyond the end of the hex nut.
5. Slide the post mount into position on the threaded rod. Place the 1/2" washer followed by the 1/2" lock washer onto the threaded rod. Tighten hex nut until post mount is secure.
6. Further secure the post mount using (2) of the provided 2 1/2" stainless steel screws on each side the post mount in the predrilled holes.
7. Insert post into post mount and level vertically. DO NOT SUBSTITUTE ANY POST SLEEVE FOR THE ONE PROVIDED IN THE KIT.
8. Secure post in post mount using (2) of the included 2 1/2" stainless screws on each side of the post mount. Indentations on each side of the post mount mark the correct location for each screw. Leave the middle indentation unused. It may be necessary to drill a 1/8" pilot hole.
9. Slide the post kit base down the post and over post mount.
10. Attach taper cap to post sleeve with PVC glue.

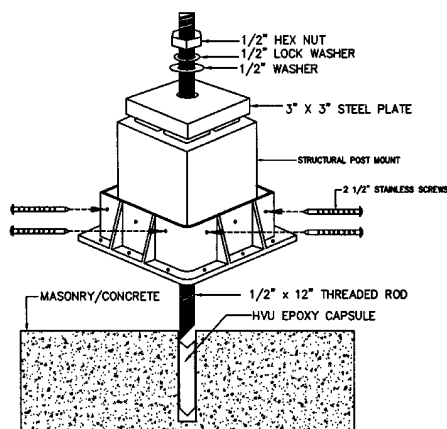
Installation Instructions for Masonry Application: (See Masonry Application Diagram)

Tools Needed for Masonry Installation: Hammer drill with 1/2" bit, drill, #3 Phillips head bit, level, wrench, 3/4" socket, mallet and appropriate personal protection equipment.

1. Determine the mounting location for the center of the post mount and hammer drill a 1/2" hole 4 1/4" deep for the provided epoxy capsule. Clean dust out of hole before inserting epoxy capsule. (Place unopened epoxy capsule into hole.)
2. Thread a nut on the threaded rod. Place a washer on top of the first nut and then thread a second setting nut down on top of the washer. Tighten the two nuts together "locking" the washer between them. The top nut should be flush with the top of the rod. Insert a square drive shaft into the hammer drill and attach the proper drive socket. At the rotary hammer drill setting, engage the top nut of the threaded rod assembly with the socket and drive the rod down through the capsule. Stop drill rotation immediately when rod reaches bottom of hole. A socket wrench or any adjustable wrench will work as well. (Threaded rod will mix with epoxy for full set.) Curing times: 20 minutes above 68 degrees, 30 minutes above 50 degrees, 1 hour above 32 degrees, 5 hours above 23 degrees (Fahrenheit).
3. Slide the post mount into position on the threaded rod.
4. Place 3" square plate, (1) 1/2" washer, (1) 1/2" lock washer in that order onto the threaded rod and secure the post mount by tightening down with (1) 1/2" hex nut.
5. Follow instructions 7-10 of the wood application instructions.



MASONRY APPLICATION

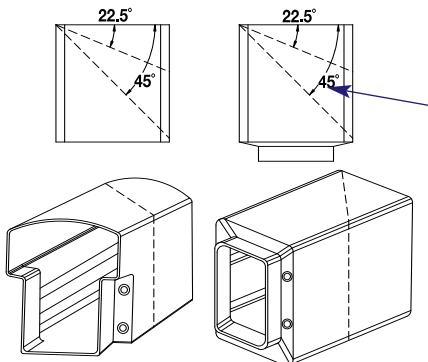


Multi-Angle Brackets must be field cut to the desired angle.

22.5 ° ANGLE APPLICATION

Tools Required: tape measure, miter saw, and personal protective equipment.

1. Place the multi-angle brackets on the top and bottom rails making sure the bracket front goes on the rail first.
2. Measure the distance between the mounting surfaces.
3. With the bracket on the rail, cut the rail and bracket to the required length with the miter saw set at 22.5°.



45° ANGLE APPLICATION

Tools Required: tape measure, miter saw, and personal protective equipment.

Note: It is necessary to have a 5" mounting surface when mounting a 45° bracket that is not a corner mount. (A 5" post sleeve can be used.)

1. Place the multi-angle brackets on the top and bottom rails making sure the bracket front goes on the rail first.
2. Measure the distance between the mounting surfaces.
3. With the bracket on the rail, cut the rail and bracket to the required length with the miter saw set at 45°.

It is necessary to have a 5" mounting surface when mounting a 45° bracket that is not a corner mount. (A 5" post sleeve can be used.)

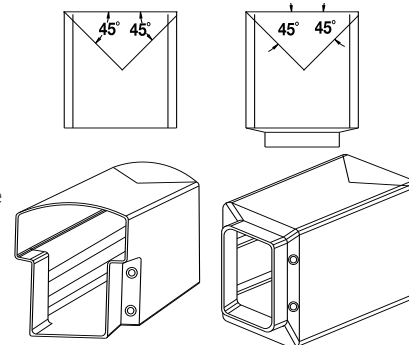
45° CORNER APPLICATION

Tools Required: speed square, jigsaw, sandpaper, miter saw, duct tape, and personal protective equipment.

1. With the bracket end flush with the end of the rail, trim 1-1/2" off the length of the bracket and rail.
2. Use the speed square to scribe a 45° line from each mounting corner on the top and bottom of the bracket until they cross.

3. Use the duct tape to hold the bracket in place on the rail during cutting.
4. Use the jigsaw to cut out the scribed areas on the top and bottom of the bracket. It may be necessary to lightly sand the cut area on the bracket.

5. It may be necessary to caulk the seams where the bracket meets the mounting surface.



35°-41° STAIR APPLICATION

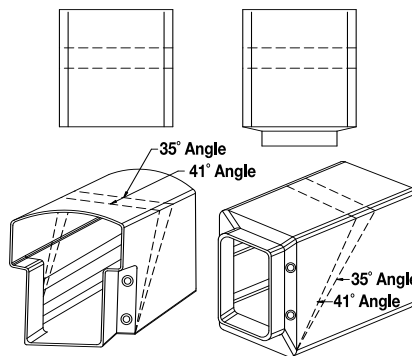
Tools Required: tape measure, miter saw, and personal protective equipment.

1. Place the multi-angle brackets on the top and bottom rails making sure the bracket front goes on the rail first.
2. Place the bottom rail with brackets on the stair tread (spindle holes up) allowing the brackets to extend past the mounting surfaces. Be sure to leave the same distance between the last spindle hole and the mounting surface at each end.

3. Scribe the brackets where they cross the mounting surface for the correct cut.
4. Cut the rail and bracket at the scribe mark for the desired angle.

5. With the bottom rail beside the mounting surfaces, place a spindle in the last holes at the top and bottom of the rail.
6. Place the top rail on the spindles allowing the top rail brackets to extend past the mounting surfaces.

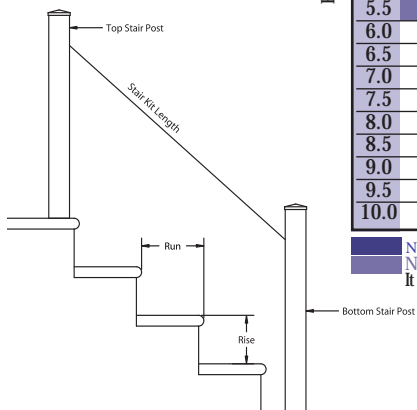
7. Scribe the brackets where they cross the mounting surface for the correct cut.
8. Cut the rail and bracket at the scribe mark for the desired angle.



Run in inches

Run in inches	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
3.5	28	27	25	24	22	21	20	19	18	18	17	16	16	15	15	14	14	13
4.0	32	30	28	27	25	24	23	22	21	20	19	18	18	17	17	16	15	15
4.5	35	33	31	29	28	27	25	24	23	22	21	21	20	19	18	18	17	17
5.0	38	36	34	32	30	29	28	27	25	24	23	23	22	21	20	20	19	18
5.5	40	38	36	35	33	31	30	29	28	27	26	25	24	23	22	21	21	20
6.0	43	41	39	37	35	34	32	31	30	29	28	27	26	25	24	23	22	22
6.5	45	43	41	39	37	36	34	33	32	31	29	28	27	27	26	25	24	23
7.0	47	45	43	41	39	38	36	35	34	32	31	30	29	28	27	27	26	25
7.5	49	47	45	43	41	40	38	37	36	34	33	32	31	30	29	28	27	27
8.0	51	49	47	45	43	42	40	39	37	36	35	34	33	32	31	30	29	28
8.5	53	51	49	47	45	43	42	40	39	38	36	35	34	33	32	31	30	30
9.0	54	52	50	48	47	45	43	42	41	39	38	37	36	35	34	33	32	31
9.5	56	54	52	50	48	47	45	44	42	41	40	38	37	36	35	34	33	32
10.0	57	55	53	51	50	48	46	45	44	42	41	40	39	38	37	36	35	34

Note: EnduraRail Standard Stair Kits only accommodate a 30-34 degree angle of slope on stair applications.
 Note: The Multi-Angle Bracket can be used for stair applications that range from 35-41 degrees.
 It may be necessary to special order stair kits that exceed 34 degrees. Call our Customer Service Department for more details.



Stair Application Guide

POST WRAP & POST SLEEVE INSTALLATION

POST WRAP INSTALLATION

Post Wraps will accommodate the following post sizes:

Post Wrap Size	Inside Width	Largest Square Post	Largest Round Post
4"	3 1/4" - 4"	4"	4 1/2"
6"	5 1/4" - 6"	6"	6 1/2"

Note: Treated wood posts vary in size and may have to be adjusted before installation of Post Wrap.

Tools required for installation:

tape measure, saw, white rubber mallet and PVC fence glue.

1. Measure opening to determine Post Wrap length.
2. Trim Post Wrap sections to desired length.

3. Snap together (2) pieces of the Post Wrap. Start installation at one end and continue entire length. If necessary, a white rubber mallet can be used to tap the pieces into place. (Make sure to use the same channel on each Post Wrap section as you snap them

together.) SEE FIGURE 1.

4. Position the Post Wrap around the post.

5. Snap together the third piece of Post Wrap. SEE FIGURE 2.

6. Snap together the fourth piece of Post Wrap to complete installation. SEE FIGURE 3

Note: If installing around a round post, a toe-nailing attachment or "L" bracket attachment into the soffit and floor can be used to keep the installed Post Wrap from moving. A Trim Kit should be used to cover screws or brackets.

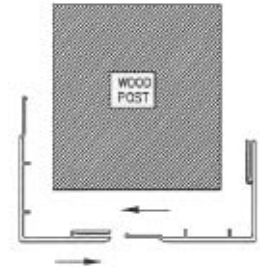


Figure 1

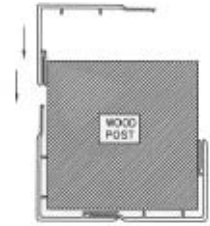


Figure 2

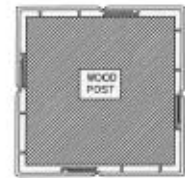


Figure 3



Post Wrap Trim Kit

TRIM KIT INSTALLATION INSTRUCTIONS (sold separately)

Each Trim Kit Includes: (8) Snap Together Trim Pieces (Top and Bottom)

1. After Post Wrap is installed, snap (4) trim pieces around the top and (4) trim pieces around the bottom of Post Wrap snugly. Trim pieces can be cut to accommodate the size of the installed Post Wrap.

2. PVC fence glue can be applied to hold the Trim Kits into place at the top and bottom of the Post Wrap.

POST SLEEVE INSTALLATION

A 4" x 4" Post Sleeve can be installed over a 4" x 4" nominal wooden insert consisting of pressure treated southern yellow pine or better. The wooden insert shall be attached to the support substrate utilizing two 1/2" diameter carriage bolts installed along the centerline of the post located at 1 3/4" and 5 3/4" from the top of the floor surface with a minimum distance of 1 3/4" from the lowest installed carriage bolt to the bottom of the post. (See Figure 1.) The support substrate shall be a minimum of 7 1/4" deep.

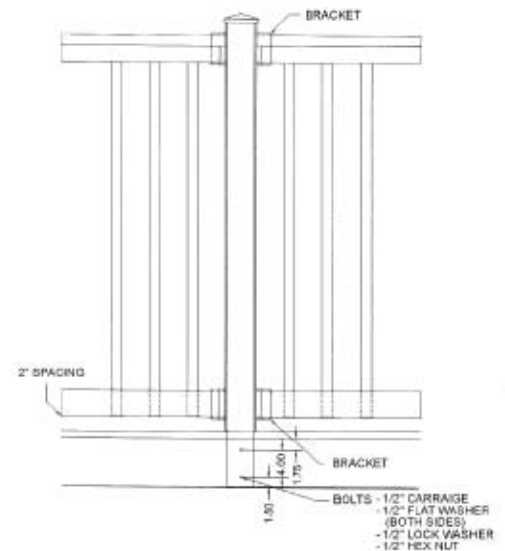
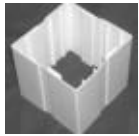


Figure 1* - STANDARD POST SLEEVE/WOOD INSERT INSTALLATION



Cross Section of Post Wrap

Post Wrap

QUICKPOST-LTF & DURAPOLY POST INSTALLATION

Tools Required for Installation:

For larger projects, the miter saw and drill are strongly recommended.



QUICKPOST-LTF INSTALLATION

Each QuickPost-LTF Includes:

(1) Post (2) Mounting Plates (8) Screws

1. Measure opening to determine post length. Deduct 3/8" total to accommodate top and bottom mounting plates.

Note:

For 36" EnduraRail railing: Do not trim more than 6" from the bottom of post, trim balance from top.

For 42" EnduraRail railing: Do not trim the bottom of post, trim only the top.

2. Trim post. A miter saw with a carbide multi-purpose blade is recommended (be sure to use personal protective wear). Be sure to match cut with same pitch as slope of floor.
3. Install bottom plate using 4 screws (provided). (The 8 screws provided will work for wood or masonry applications. When installing screws into concrete, drill a 3/16" pilot hole 1/4" deeper than the length of the screw.)

Note: Be sure the location on the floor for the mounting plate allows the load on the top of the post to be centered and evenly distributed.

Using a plumb tool, line up the ceiling plate with the floor plate by marking the location of at least two holes from the floor plate on the ceiling. Secure ceiling plate with (4) screws when in position.

4. After installation of plates, raise soffit approximately 1/2". Set post on bottom plate. Position top of post with top plate. Lower soffit on top of post. There is no need to screw post to plate.

Note: If using a trim kit, slide onto top and bottom of post before

post is installed into mounting plates.

5. Check post with level and remove temporary support allowing the top bracket to fit down on the top of the post.

Note:

When installing EnduraRail™ railing to the post, pre-drill holes for bracket screws using a 1/8" drill bit.

Load Bearing Capacity: 5" = 2,500 lbs. / 6" = 5,000 lbs.

Uplift: If building codes require uplift connections, contact your distributor for recommendations.

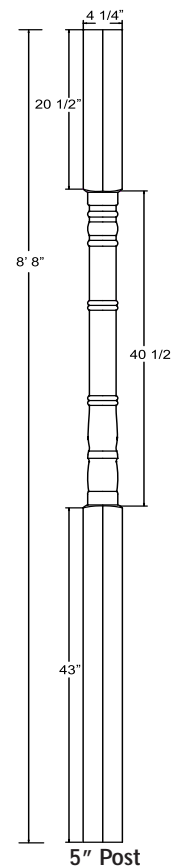
INSTALLING QUICKPOST-LTF WITHOUT MOUNTING PLATES

If flush mounting post without plates is desired, follow instructions above, but DO NOT trim additional 3/8" for mounting plates. Pre-drill necessary holes at an angle, secure with countersunk screws, fill with putty and sand.

TRIM KIT INSTRUCTIONS FOR QUICKPOST-LTF PORCH POST (sold separately)

Parts Included: (2) Trim Pieces (Top and Bottom)

1. Before post is installed, slide 1 trim piece at the top of the post and 1 trim piece at the bottom of the post.
2. PVC fence glue can be applied to hold the Trim Kit into place at the top and bottom of the post.
3. There may be some marginal spacing in the Trim Kit to Post fit. Exterior caulk can be used as a filler.



5" Post

DURAPOLY POST INSTALLATION

Each DuraPoly Post Includes:

(1) Post (2) Mounting Plates (8) Screws

1. Measure opening to determine post length. Deduct 3/8" total to accommodate top and bottom mounting plates.

Note:

For 36" EnduraRail™ railing: Do not trim more than 6" from the bottom of post, trim balance from top.

For 42" EnduraRail™ railing: Do not trim the bottom of post, trim only the top.

2. Trim post. A miter saw with a carbide multi-purpose blade is recommended (be sure to use personal protective wear). Be sure to match cut with same pitch as slope of floor.
3. Install bottom plate using 4 screws (provided). (The 8 screws provided will work for wood or masonry applications. When installing screws into concrete, drill a 3/16" pilot hole 1/4" deeper than the length of the screw.)

Note: Be sure the location on the floor for the mounting plate allows the load on the top of the post to be centered and evenly distributed.

Using a plumb tool, line up the ceiling plate with the floor plate by marking the location of at least two holes from the floor plate on the ceiling. Secure ceiling plate with (4) screws when in position.

4. After installation of plates, raise soffit approximately 1/2". Set post on bottom plate. Position top of post with top plate. Lower soffit on top of post. There is no need to screw post to plate.

Note: If using a trim kit, slide onto post before post is installed into mounting plates.

5. Check post with level and remove temporary support allowing the top bracket to fit down on the top of the post.

Note: When installing EnduraRail™ railing to the post, pre-drill holes for bracket screws using a 1/8" drill bit.

Load Bearing Capacity: 5" = 2,500 lbs. / 6" = 5,000 lbs.

Uplift: If building codes requires uplift protection, contact Dixie-Pacific or your distributor for recommendations.

INSTALLING DURAPOLY POST WITHOUT MOUNTING PLATES

If flush mounting post without plates is desired, follow instructions above, but DO NOT trim additional 3/8" for mounting plates. Pre-drill necessary holes at an angle, secure with countersunk screws, fill with putty and sand.

DURAPOLY POST PAINTING INSTRUCTIONS

1. Caulk seams between post and mounting brackets.
2. Make sure all surfaces are clean prior to painting.
3. Prime DuraPoly Post with a light coat of exterior latex primer.
4. Allow primer to dry completely before applying 2 coats of exterior latex paint. (Allow adequate drying time in between each coat of paint.)
5. Do not use paint or solvents containing acetone.
6. Oil based (alkyd) primer and paint are not recommended.

Note: Krylon® Fusion® paint for plastics is an alternative to exterior latex paint.

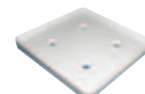
TRIM KIT INSTRUCTIONS FOR DURAPOLY POSTS (sold separately)

Parts Included: (2) Trim Pieces (Top and Bottom), (4) Screws

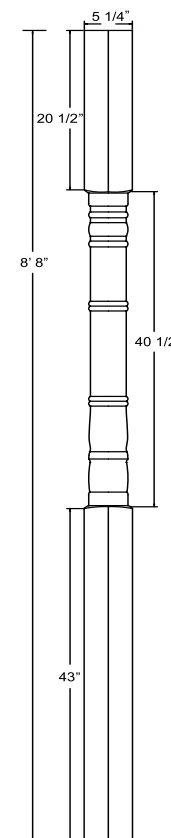
1. Before post is installed, slide 1 trim piece at the top of the post and 1 trim piece at the bottom of the post.
2. Pre-drill and secure trim pieces with countersunk screws. Fill screw holes with putty and sand.
3. There may be some marginal spacing in the Trim Kit to Post fit. Exterior caulk can be used as a filler.

TRIM KIT PAINTING INSTRUCTIONS

1. Scuff sand both trim pieces prior to priming and painting.
2. Make sure all surfaces are clean prior to painting.
3. Follow post painting instructions.



Mounting Plate



6" Post